

CLAIMS

1. A controlled acoustic beam generator system comprising:
an array of acoustic transmitters;
a signal generator, for generating an acoustic signal of predetermined properties;
5 amplifying means for amplifying the acoustic signal;
multi-channels signal processor, for processing the acoustic signal, distributing corresponding processed acoustic signals, having predetermined properties, including amplitude and phase, into the array of acoustic transmitters;

10 steering means, for steering an acoustic beam which is the resultant of transmitted processed signals by the array of acoustic transmitters;

a control unit, for the operation of the system, by controlling the signal generator, the multi-channel signal processor, and the steering means.

2. The system of claim 1, wherein the steering means comprises phased 15 array means.

3. The system of claim 2, wherein the phased array means is incorporated in the multi-channels signal processor.

20 4. The system of claim 1, wherein the steering means comprises mechanical steering means.

5. The system of claim 4, wherein the mechanical steering means comprises a hydraulic steering device.

25 6. The system of claim 1, wherein the system is powered from the main power supply.

7. The system of claim 1, wherein the system is powered from a power 30 supply generator.

8. The system of claim 1, wherein the control unit is partially or in whole a remote control unit.

9. The system of claim 1, wherein the control unit is provided with a beam 5 direction selector for selecting a desired direction for the acoustic beam.

10. The system of claim 1, wherein the control unit is provided with a program selector, for selecting a desired signal program, from a set of predefined signal programs.

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11. The system of claim 1, wherein the control unit is provided with a power level selector for selecting a desired power level for the system.

12. The system of claim 1, wherein the system is adapted to be mounted on a 15 vehicle.

13. The system of claim 1, wherein the system is adapted to be mounted on a marine vessel.

20 14. The system of claim 13, wherein the array of acoustic transmitters is adapted to be mounted below water level.

15. The system of claim 1, wherein the system is adapted to be mounted on a floating platform.

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16. The system of claim 15, wherein the array of acoustic transmitters is adapted to be mounted submerged below water level.

17. The system of claim 1, wherein the array of acoustic transmitters 30 comprises a plurality of sets of acoustic transmitter arrays.

18. The system of claim 17, wherein sets of acoustic transmitter arrays are operable separately or simultaneously as desired.

19. The system of claim 1, wherein the system is adapted to be airborne.

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20. The system of claim 1, incorporating transmission of hidden messages.

21. The system of claim 1, wherein it is mounted on a stationary support.

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22. The system of claim 1, wherein the system is submerged in water.

23. The system of claim 1, wherein the array of acoustic transmitters comprises acoustic transmitters having outlets of uniform shape.

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24. The system of claim 23, wherein the uniform shape is circular.

25. The system of claim 23, wherein the uniform shape is polygonal.

26. The system of claim 25, wherein the uniform shape is hexagonal.

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27. The system of claim 25, wherein the array of acoustic transmitters is arranged in a beehive formation.

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28. The system of claim 1, wherein the signal generator generates continuous wave acoustic signals.

29. The system of claim 1, wherein the signal generator generates acoustic signal pulses at constant frequency with desired adjustable ratio between the pulse period and interval between the pulses.

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30. The system of claim 1, wherein the signal generator generates acoustic signal pulses at variable amplitude levels and frequencies.

31. A controlled acoustic beam generator system substantially as described in the present specification, accompanying figures and appending claims.